Overview of Clean Air Interstate Rule (CAIR) & Options for Implementation

Presentation Outline

1. Overview of CAIR
2. Option One Proposal
   - SO2 Market
   - NOx Markets
3. Option Two Proposal
4. Questions and Comments

Questions for Comment

- Basis for allocations
- Baseline for determining allocations
- Set-asides
- Option Two ratios

CAIR Overview

- Requirement to reduce interstate transport of ozone and fine particles.
- EPA established emission budgets for each state for each pollutant of concern.
- EPA determined that reducing emissions from power plants was highly cost-effective.
- Covered units are electric generating units (EGUs) and co-generators serving a generator with nameplate capacity of 25 MW or greater.

CAIR Trading Program

- EPA's favored approach to reach the budgets established by EPA is to implement three separate trading markets for Annual SO2, Annual NOx and Ozone-Season NOx emissions.
- EPA developed a model rule for the states to use to implement the federal trading markets.
- The Annual and Ozone-Season NOx trading markets are separate compliance requirements.
- Reductions under CAIR are implemented in two phases:

	Phase I	Phase II
NOx	2009-2014	2015+
SO2	2010-2014	2015+

WDNR's CAIR Proposals

- WDNR proposes to use the EPA model rule as a framework with some alterations to the allocation and allowance structure for the NOx markets.
- WDNR is proposing two options for the implementation of CAIR.
- Under both options, WDNR would participate in the federal trading program operated by the US EPA.

CAIR Option One Proposal

CAIR program separate of BART and RACT compliance requirements

SO2 Trading – Option One

WDNR proposes the following structure:

- SO2 trading market would follow the EPA model rule.
- Under the model rule, the SO2 allowances are based on Title IV Acid Rain allowances
  - Previously distributed in perpetuity.

SO2 Trading Cont.

- Emission reductions come from retirement ratios that change the value of allowances depending on the year the allowance was issued.
- Retirement Ratios

Year Allowance Issued	Ratio	Value
2009 & earlier (Title IV)	1:1	1 ton
CAIR Phase I (2010-2014)	2:1	0.5 of a ton
CAIR Phase II (2015+)	2.86:1	0.35 of a ton

NOx Trading – Option One

WDNR proposes the following structure:

- Same structure for NOx Annual and Ozone Seasonal markets.
- Allocations to both existing and new sources would be based upon gross generation output.
- Baseline would be updated every three years.
- No fuel weighting
- Compliance Supplement Pool (Annual NOx Program) would be permanently retired.

NOx Trading – Combined Heat and Power

- Combined heat and power (CHP) units, also known as cogeneration, generate power and thermal energy from a single fuel source.
- CHP projects would receive allocations based upon electrical output and an equivalent value of the thermal output.

NOx Trading – Set-Asides

- A set-aside is a pool of allowances separate from the main allocation pool.
- The annual and seasonal markets include two separate set-asides.
  - New Sources
  - New Renewable and Energy Efficiency Projects (RE/EE)

NOx Trading –Set-Asides

- New Source Set-Aside
  - Phase I: 5%
  - Phase II: 3%
- New RE/EE Set-Aside
  - Phase I: 3%
  - Phase II: 5%

Differences between EPA Model Rule and WDNR Option One Proposal

	EPA Model Rule	**WDNR**
Allocation basis- existing sources	Heat input	Electrical output
Length of allocation	Five years	Three years
Fuel weighting	1.0 for Coal 0.6 for Oil 0.4 for all others	No fuel weighting
RE/EE source set-aside	No RE/EE set-aside	Phase I: 3% Phase II: 5%
Annual CSP	Hardship and/or early reductions	Permanently retired

CAIR – Option Two Proposal

Integration of BART and RACT compliance requirements for EGUs into CAIR Trading Program

Option Two – Integration of CAIR, BART and RACT Compliance Requirements

- Applies only to EGUs
- Purpose: to achieve focused reductions intended by the individual requirements of BART and RACT while providing the flexibility of an open market national trading program.

Option Two – Continued

- NOx and SO2 allowances would be allocated according to the CAIR program structure outlined in Option One.
- Under both NOx and SO2 markets, BART and RACT units would be subject to a higher retirement ratio.

Option Two – Continued

- Ratios would be based on two factors:
  1. RACT and BART level of control estimated for the units
  2. An additional reduction associated with the flexibility of a trading program

Option Two – Continued

- Additional reduction may be based on a number of factors:
  - Additional 10% reduction over EPA's minimum requirements
  - Level of control expected to be installed
  - Incremental cost of compliance
  - Potential to load shift to units not affected by increased ratios
- The retirement ratio may be based on either the year the allowance was issued or the year the allowance was surrendered for compliance.

Why Option Two?

- Uses national trading market to comply with BART and RACT
- Gives flexibility to utilities to determine least cost control strategy
- Achieves focused reductions of BART and RACT requirements

We would like specific feedback on the following issues.

- Baseline in Option One and Two
  - Frequency of updating
  - Years of data to use
- Allocations in Option One and Two
  - Unit, plant or generator level?
  - Heat input or generation output (net or gross)?
  - Fuel weighting?

We would like specific feedback on the following issues.

- Set-asides in Option One and Two
  - Size
  - Undersubscription and oversubscription
  - Aggregation of smaller sources?
- Option two
  - Retirement ratio applied on a unit-by-unit or system-wide basis
  - Ratio applied to year allowance is issued or year used?
  - Factors used to determine size of ratios

Questions?

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